







Bureau of Air Quality

# THE UPDATE PROCESS FOR THE CLIMATE CHANGE ACTION PLAN AND THE ANATOMY OF A WORK PLAN

Citizens Advisory Committee
January 21, 2014

### Climate Change Advisory Committee

- The Climate Change Advisory Committee (CCAC)
  consists of 18 members appointed by the Governor
  and the Majority and Minority leaders of the Senate
  and House, along with 3 ex-officio voting members.
  - Secretary of Conservation and Natural Resources, the Secretary of Community and Economic Development and the Chair of the Pennsylvania Public Utility Commission.
- During this Update process, the CCAC met 16 times and conducted 4 conference calls.

#### Climate Change Advisory Committee

- The CCAC established four sub-committees:
  - Energy Sector,
  - Residential, Commercial and Industrial sector,
  - Land Use & Transportation sector and
  - Agriculture and Forestry sector.
- The subcommittees provide the DEP with valuable resources and insight into the development of the work plans and held multiple conference calls.



#### Climate Change Advisory Committee

- The CCAC appointments are for 4 years.
- Approximately one half of the members' terms expired since the development of the 2009 Climate Change Action Plan, resulting in many new members.
- There are currently 6 vacancies on the committee.



#### **Update Process**

- The 2013 Update was based on a review and evaluation of scientific literature and data along with a macroeconomic analysis of the work plans.
- The report discusses work plans that when implemented reduce Green House Gas (GHG) emissions in the Commonwealth.



#### **Update Process**

- The work plans cover a wide range of options for emissions reductions in the energy, residential, commercial, industrial, land use, transportation, agriculture and forestry sectors in Pennsylvania.
- The DEP, with the advice of the CCAC, developed the work plans following a general criteria for all of the individual work plans.



#### Work Plans

- Work plans provide a framework for planning and serve as a guide during a specified time period for carrying out work.
- During the Update process, the DEP in consultation with the CCAC developed 41 different work plans covering various sectors within the Commonwealth.
- 28 work plans were incorporated into the Update.



- This example of a work plan represents one of the plans incorporated into the Update and is aimed at reducing GHG emissions from the Residential, Commercial, and Industrial (RCI) sector.
- This work plan was developed by DEP in consultation with the RCI sub-committee and the full CCAC.
- Re-Light Pennsylvania was endorsed for incorporation into the Update by a CCAC vote of 13 yes, 0 no and 1 abstention.



- **Summary** A brief introduction to the work plan and what it involves.
- Goals The proposed results at the end of the specified time period (through 2020).
- Implementation What actions will be necessary to accomplish the goal and usually a time line for the completion of the initiatives contained in the work plan.
- Assumptions and Calculations Certain assumptions must be made in the development of a work plan. These assumptions are analyzed and calculations are performed to determine cost effectiveness and potential GHG reductions.



- GHG reductions and Cost Effectiveness A summary table
  of expected emissions reductions and the cost per ton of
  CO2e saved or reduced.
- Potential Overlap Identifies other work plans were the emissions reductions from this work plan may be accounted.
- CCAC Member Comments Individual CCAC member comments of agreement or disagreement with the particular work plan are presented here.



Annual Results (2020)			Cumulative Results (2013-2020)		
GHG Reductions (MMtCO₂e)	Costs (Million \$)	Cost-Effectiveness (\$/tCO <sub>2</sub> e)	GHG Reductions (MMtCO₂e)	Costs (NPV, Million \$)	Cost-Effectiveness (\$/tCO <sub>2</sub> e)
10.3	-\$1,486	-\$64	71.1	-\$8,153	-\$145











Bureau of Air Quality

## Thank you.

#### Mark Brojakowski

Bureau of Air Quality

717-772-3429

mbrojakows@pa.gov